FINAL REPORT TO THE SENIOR CITIZENS SECRETARIAT

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DICKINSFIELD EXTENDED CARE CENTRE

COGNITIVE IMPAIRMENT UNIT EVALUATION PROJECT

INTRODUCTION

In 1985, the Dickinsfield Extended Care Centre implemented a demonstration program for 25 patients with cognitive impairment. Ms. Janie Lindsay, B.A. M.S.W. R.S.W. conducted a descriptive study in conjunction with the demonstration program.

The nursing staff identified patients who were cognitively impaired, age 55 years or older and exhibited disruptive behaviors.

The patients for the 25 space program were selected for admission according to frequency and severity of disruptive behavior. Agreement of the guardian for transfer of the patient to the Cognitive Impairment Unit was also required.

The patients who moved to the Unit, as well as those who did not, were observed for 14 behaviors in 20-day blocks of time in 1985, 1986 and 1987 (summary attached).

It should be recognized that the project was not done as "pure" research. Since the mission of the Centre is to provide patient care, this takes priority over all other considerations.

The tracking tool was selected because it was already used by the nursing staff of the Centre. Since the staff were familiar with it, they did not need to be trained to apply it.

Patients were priorized for admission to the unit based upon frequency and severity of their undesirable behaviors. Permission for transfer to the unit was dependent upon agreement of the guardian or next of kin. Some patients with severe undesirable behaviors were not transferred to the Cognitive Impairment Unit because the guardian or next of kin did not wish to have the patient moved. The program, therefore, did not necessarily include all Centre patients with the most severe undesirable behaviors.

Subjects were lost for study purposes through moves on and off the unit and some died during the observation period. During the early part of the evaluation the tracking of the patients' behaviors was scheduled when the Centre was able to obtain the services of an individual who could compile the results. This was done through the Summer Temporary Employment Program and the Priority Employment Program. More subjects could have been included in the analysis if the time frame had been shorter.

The study ended with very small numbers of surviving subjects. (Seven residing on the Cognitive Impairment Unit and ten on other units.) Thus the statistical comparisons may be of limited value. We have applied the findings intuitively rather than conclusively.

Our experience leads us to suggest that observation of the frequency of behaviors should not be the only method used in the evaluation of a program. Focusing on a small number of the most problematic behaviors over a shorter span of time may, however, be useful as one factor in determining the success of a program. Early and consistent funding should be obtained for program evaluation so that monitoring can be done sooner and individualized for patients who transfer in and out of the program.

SUMMARY OF FINDINGS

The tracking of patient behaviors indicates that patients who resided on the Cognitive Impairment Unit showed:

- An increase in undesirable eating habit behaviors. It is believed that this is the result of the staff encouraging people, (for example, by increasing finger foods) to eat without assistance even though their eating habits may have been somewhat untidy.

- A decrease in withdrawal which may have been due to
  - the staff encouraging communication
  - the removal of the stress of living in the general milieu of the Centre
  - reduction in medication utilization.

- An initial increase in agitation then decrease to slightly less than the pre-admission level. The reduction in the use of medications may have been a factor (although it is noted that the plotted trend was quite similar to that of cognitively impaired patients who were residents throughout the facility).

- Increased on-site wandering. Patients were able to walk freely about the unit in relative safety. (The closed doors to the unit were a deterrent to leaving the unit.) A patient monitoring system was installed to alert nursing staff to patients leaving the unit.

- A decrease in verbal and physical aggression. The staff made a conscious effort to avoid conflict and confrontation. Skills in handling aggression were developed by the staff. It is likely that moving the cognitively impaired patient out of the general milieu of the Centre reduced conflicts with other patients. (The rates of physical aggression exhibited by the Cognitive Impairment Unit patients was originally very high and some of the drop may be due to regression to the mean.)

- Increase of incontinence mainly between the pretest and first post test in patients on the Cognitive Impairment Unit. We have no explanation for this, however, it may have been due to the aging of the population.

- An increase in problematic smoking behaviors. This was likely due to the advancing disease process and deteriorating condition of the smokers.

CONCLUSION

Although some undesirable behaviors increased, they were managed well on the Cognitive Impairment Unit during the three years of the project. Since programs to enhance the quality of life of cognitively impaired patients may result in an increase in some undesirable behaviors, we believe that improvement in quality of life should continue to be the purpose of the program. Changes in frequencies of behaviors should be judiciously interpreted as indicators of program success or failure.

Improvement in the quality of life of patients on the Cognitive Impairment Unit is likely the result of:

- separation from the general milieu of the Centre
- skills developed by the staff in providing care
- specialized programming.

Since the implementation of the 25-bed Demonstration Program the Cognitive Impairment Unit has expanded to 50 patients and has become an approved program of the Dickinsfield Extended Care Centre. The functional program developed for the unit has been shared with the other three Hospital District 24 Centres and the long range plan includes the development of a cognitive impairment unit in each of these Centres.

Since there are many factors which influence the behaviors of the cognitively impaired patient, many opportunities for future research exist. For example, usefulness of medications, relationship between safety devices and behavior, impact of programming and influence of skilled staff could be studied.

BEHAVIORAL DESCRIPTION PROFILE SUMMARY
FOR SURVIVING (TABLE II)
GROUP A (N = 7) PATIENTS AND
GROUP B (N = 10) PATIENTS

BEHAVIOR	(BASELINE) PRETEST 1985	POST-TEST 1 1986	POST-TEST 2 1987	END OF STUDY SUMMARY PRETEST VS POST-TEST 2
1. Eating Habits	A 14.143 B 24.200 Group B had significantly more eating habit problems than Group A.	A 23.143 B 23.400 Approximately same frequencies for Groups A and B. Group A had a significant increase from Pretest 1985 and Group B had slight decrease.	A 27.429 B 19.300 Significant increase for Group A from Post-test 1. Significant decrease for Group B from Post-test 1.	Group A frequency increased almost two times from Pretest results and Group B had significant decrease from Pretest results.
2. Withdrawal	A 59.714 B 40.300 Group A Approximately 1 1/2 times more withdrawn than Group B.	A 34.571 B 42.200 Significant decrease for Group A and Group B frequency increased.	A 35.286 B 46.400 Group A frequency increased slightly from Post-test 1. Group B frequency increased more than Group A.	Group A less frequently withdrawn than Group B. Group B frequencies steadily increased during the three test phases.
3. Agitation	A 10.0 B 7.90 Group A more agitated than Group B.	A 14.143 B 15.300 Group B frequency increased more from Pretest 1985. Both Groups A and B frequencies increased and were approximately the same in Post-test 1.	A 9.286 B 4.700 Group A frequency decreased from Post-test 1. Group B frequency decreased approximately 2/3 from Post-test 1 observations.	Group A agitation behavior frequency decreased slightly from Pretest 1985 results, however, Group A agitation behavior was twice as frequent as in Group B in the Post-test 2 phase

BEHAVIOR (BASELINE)	PRETEST 1985	POST-TEST 1 1986	POST-TEST 2 1987	END OF STUDY SUMMARY PRETEST VS POST-TEST 2
4. Noisy, Disturbing to Others	A 8.714 B 3.700 Group A approximately twice as noisy as Group B.	A 11.143 B 7.800 Increased frequencies for both Group A & B, however, Group B frequency increases were greater.	A 10.286 B 4.600 Slight decrease for Group A from Post-test 1 results. Marked decrease for Group B from Post-test 1 results.	Group A frequency increased from Pretest results. Group A was approximately two times more noisy than Group B in Post-test 2 results.
5. Wanders Off Site (Out of Building)	A 0.571 B 5.400 Group B wanders off site ten times more frequently.	A 1.00 B 4.500 Group B wandered 4.5 times more frequently.	A 2.571 B 0.300 Frequencies observed for both Groups A and B were very low.	
6. Wanders On Site (In Building)	A 2.143 B 5.300 Group B wanders on site approximately two times more than Group A.	A 6.143 B 4.400 Group A frequency increased approximately three times from Pretest in 1985. Group B decreased slightly from Pretest 1985 results.	A 3.571 B 1.200 Group A frequency decreased approximately 1/2 from Post-test 1. Group B frequency decreased approximately 3/4 from Post-test 1.	Group A had increased wandering on site. Group B had significantly decreased wandering on site. Group A wandered on site approximately three times more than Group B.
7. "Gathering Behavior"	A 0.0 B 0.800 Low frequencies reported.	A 0.857 B 0.300 Frequencies observed for both Groups A and B were very low, therefore findings not significant to report.	A 1.0 B 0.0 Frequencies observed for both Groups A and B were very low, therefore findings not significant to report.	

BEHAVIOR	(BASELINE) PRETEST 1985	POST-TEST 1 1986	POST-TEST 2 1987	END OF STUDY SUMMARY PRETEST VS POST-TEST 2
8. Verbally Aggressive	A 8.429 B 4.0 Group A approximately two times more verbally aggressive than Group B.	A 6.0 B 8.500 Group A frequency decreased. Group B frequency increased approximately two times from Pretest 1985 results.	A 3.714 B 5.400 Group A frequency decreased approximately 1/2 from Post-test 1. Group B frequency also decreased significantly.	Group A had steady significant decreases in verbal aggression. Group B showed increased verbal aggression from Pretest results. Group A was approximately 1 1/2 times less verbally aggressive in Post-test 2 than Group B.
9. Physically Aggressive	A 20.714 B 11.300 Group A approximately two times more physically aggressive than Group B.	A 16.857 B 13.600 Group A decreased. Group B increased.	A 12.143 B 9.400 Decreases for both Groups A and B.	Group A showed steady greater decreases in physical aggression than Group B, but frequency remained higher than Group B in Post-test 2.
10. Sexually Aggressive	A 0.286 B 0.600 Low frequency reported.	A 0.286 B 0.100 Frequencies observed for both Groups A an B were very low, therefore findings were not significant.	A 0.714 B 0.200 Frequencies observed for both Groups A an B were very low, therefore findings were not significant.	

BEHAVIOR	(BASELINE) PRETEST 1985	POST-TEST 1 1986	POST-TEST 2 1987	END OF STUDY SUMMARY PRETEST VS POST-TEST 2
11. Elimination Behavior	A 20.857 B 22.700 Group B slightly higher than Group A.	A 29.14 B 28.600 Both Groups demonstrated increased frequencies from Pretest 1985 to approximately same frequencies in the Post-test 1.	A 27.571 B 32.300 Group A frequency decreased from Post-test 1 results. Group B frequency increased from Post-test 1 results.	Significant frequency increases for both Group A and B. Group A remained less incontinent than Group B.
12. Smoking Habits	A 6.571 B 11.0 Group B approximately 1 2/3 times higher than Group A.	A 9.571 B 28.300 Group A frequency increased approximately 1 1/2 times from Pretest 1985. Group B frequency increased approximately two and one-half times from Pretest 1985.	A 15.857 B 31.500 Both Groups A and B had increased frequency from the Post-test 1.	Group B smoking frequency remained approximately two times more than Group A.
13. Alcohol Use	A 0.0 B 0.100 Low frequency reported for Group B.	A 0.0 B 0.0 No frequencies reported for either Group A or B.	A 0.0 B 0.0 No frequencies reported for either Group A or B.	

BEHAVIOR	(BASELINE) PRETEST 1985	POST-TEST 1 1986	POST-TEST 2 1987	END OF STUDY SUMMARY PRETEST VS POST-TEST 2
14. Use of Safety Devices	A 48.0 B 35.0 Group A frequency approximately 1 1/2 times higher than Group B.	A 44.429 B 45.300 Group A frequency decreased from Pretest 1985. Group B frequency increased from Pretest 1985.	A 47.286 B 53.300 Both Groups A and B demonstrated increased frequencies from Post-test 1.	Slight decrease for Group A in the use of safety devices. However, while Group A started the study with a higher frequency. Group B had a significant increase in both Post-test 1 and again in Post-test 2 - ending the study with a much higher frequency than Group A.